Table J2.--Chemical Properties of the Soils

(Absence of an entry indicates that data were not estimated.)

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Br:								
Bremer	0-8	36-41	---	5.6-6.5	0	0	0	0
	8-18	36-41	---	5.6-6.5	0	0	0	0
	18-44	36-41	---	6.1-6.5	0	0	0	0
	44-60	30-36	---	6.1-6.5	0	0	0	0
Ca:								
Carlow	0-9	22-29	---	5.1-7.3	---	---	---	---
	9-36	---	23-31	4.5-6.0	---	---	---	---
	36-60	---	23-31	4.5-6.0	---	---	---	---
Ch:								
Chariton	0-8	10-18	---	5.1-6.5	---	---	---	---
	8-17	8.0-14	---	5.1-6.5	---	---	---	---
	17-20	14-17	---	5.1-6.0	---	---	---	---
	20-44	24-30	---	5.1-7.3	---	---	---	---
	44-60	16-20	---	6.1-7.3	---	---	---	---
Ed:								
Edina	0-9	14-20	---	5.1-7.3	0	0	0	0
	9-16	14-20	---	5.1-7.3	0	0	0	0
	16-36	28-42	---	6.6-7.3	0	0	0	0
	36-60	20-30	---	6.6-7.3	0	0	0	0
Fa:								
Fatima	0-10	10-16	---	6.1-7.3	0	0	0	0
	10-42	8.0-14	---	6.1-7.3	0	0	0	0
	42-60	8.0-14	---	6.1-7.3	0	0	0	0
Fr:								
Freeburg	0-12	6.0-15	---	5.1-6.0	0	0	0	0
	12-19	---	13-18	4.5-6.0	0	0	0	0
	19-30	---	14-18	4.5-5.5	0	0	0	0
	30-60	---	13-18	5.1-5.5	0	0	0	0
GaC:								
Armstrong	0-12	20-25	---	5.1-6.5	---	---	---	---
	12-36	41-50	---	5.1-6.5	---	---	---	---
	36-60	30-35	---	5.1-6.5	---	---	---	---
Gara	0-8	20-25	---	5.6-7.3	0	0	0	0
	8-42	20-25	---	5.1-6.5	0	0	0	0
	42-60	20-25	---	6.6-7.8	0-25	0	0	0
GaD:								
Armstrong	0-12	20-25	---	5.1-6.5	---	---	---	---
	12-36	41-50	---	5.1-6.5	---	---	---	---
	36-60	30-35	---	5.1-6.5	---	---	---	---
Gara	0-8	20-25	---	5.6-7.3	0	0	0	0
	8-42	20-25	---	5.1-6.5	0	0	0	0
	42-60	20-25	---	6.6-7.8	0-25	0	0	0
GcC3:								
Armstrong	0-12	30-35	---	5.1-6.5	---	---	---	---
	12-36	41-50	---	5.1-6.5	---	---	---	---
	36-60	30-35	---	5.1-6.5	---	---	---	---

Table J2.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Gara	0-8	25-30	---	5.6-7.3	0	0	0	0
	8-42	25-30	---	5.1-6.5	0	0	0	0
	42-60	25-30	---	6.6-7.8	0-25	0	0	0
GnB:								
Greenton	0-12	12-18	---	5.6-6.5	0	0	0	0
	12-28	18-26	---	6.1-7.3	0	0	0	0
	28-42	20-26	---	6.6-7.8	0	0	0	0
	42-60	---	---	---	---	---	---	---
GnC:								
Greenton	0-12	12-18	---	5.6-7.3	0	0	0	0
	12-28	18-26	---	5.6-7.3	0	0	0	0
	28-42	20-26	---	6.6-8.4	0	0	0	0
	42-60	---	---	---	---	---	---	---
GnD:								
Greenton	0-12	12-18	---	5.6-7.3	0	0	0	0
	12-28	18-26	---	5.6-7.3	0	0	0	0
	28-42	20-26	---	6.6-7.8	0	0	0	0
	42-60	---	---	---	---	---	---	---
GrB:								
Grundy	0-11	8.0-18	---	5.6-7.3	0	0	0	0
	11-24	16-24	---	5.1-7.3	0	0	0	0
	24-42	20-26	---	5.1-6.5	0	0	0	0
	42-60	14-19	---	5.6-7.3	0	0	0	0
GrC:								
Grundy	0-11	8.0-18	---	5.6-7.3	0	0	0	0
	11-24	16-24	---	5.1-7.3	0	0	0	0
	24-42	20-26	---	5.1-6.5	0	0	0	0
	42-60	14-19	---	5.6-7.3	0	0	0	0
Gu:								
Gullied Land	0-60	---	---	---	---	---	0	---
HaB:								
Hatton	0-8	6.0-12	---	5.1-6.0	---	---	---	---
	8-37	---	12-25	4.5-5.5	---	---	---	---
	37-60	---	10-20	4.5-5.5	---	---	---	---
HaC:								
Hatton	0-8	6.0-12	---	5.1-6.0	---	---	---	---
	8-37	---	12-25	4.5-5.5	---	---	---	---
	37-60	---	10-20	4.5-5.5	---	---	---	---
Hn:								
Haynie	0-7	15-20	---	7.4-8.4	0-25	0	0	0
	7-60	15-20	---	7.4-8.4	5-30	0	0	0
Ho:								
Hodge	0-9	3.0-10	---	6.6-7.8	5-10	0	0	0
	9-60	3.0-9.0	---	6.6-7.8	5-10	0	0	0
KnC:								
Knox	0-11	10-18	---	5.6-7.3	---	---	---	---
	11-38	12-22	---	5.6-7.3	---	---	---	---
	38-60	8.0-16	---	6.1-7.8	---	---	---	---

Table J2.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
KnD3:								
Knox	0-11	10-18	---	5.6-7.3	---	---	---	---
	11-38	12-22	---	5.6-7.3	---	---	---	---
	38-60	8.0-16	---	6.1-7.8	---	---	---	---
KnE3:								
Knox	0-7	10-18	---	5.6-7.3	---	---	---	---
	7-38	12-22	---	5.6-7.3	---	---	---	---
	38-60	8.0-16	---	6.1-7.8	---	---	---	---
LaB:								
Ladoga	0-11	20-25	---	6.1-6.5	0	0	0	0
	11-16	20-25	---	6.1-6.5	0	0	0	0
	16-56	20-25	---	5.1-6.0	0	0	0	0
	56-60	20-25	---	5.1-6.5	0	0	0	0
LaC:								
Ladoga	0-10	20-25	---	6.1-6.5	0	0	0	0
	10-16	20-25	---	6.1-6.5	0	0	0	0
	16-56	20-25	---	5.1-6.0	0	0	0	0
	56-60	20-25	---	5.1-6.5	0	0	0	0
Le:								
Leta	0-19	---	22-28	4.5-6.0	1-2	---	0	0
	19-34	20-28	---	4.5-7.8	1-2	---	0	0
	34-60	5.0-10	---	4.5-7.3	1-2	---	0	0
LnE:								
Lindley	0-7	---	10-16	4.5-6.0	0	0	0	0
	7-46	15-20	---	4.5-6.5	0	0	0	0
	46-60	10-16	---	4.5-7.8	0	0	0	0
LrE3:								
Lindley	0-7	---	16-22	4.5-6.0	0	0	0	0
	7-46	15-20	---	4.5-6.5	0	0	0	0
	46-60	10-16	---	4.5-7.8	0	0	0	0
LsC:								
Keswick	0-10	20-25	---	4.5-7.3	---	---	---	---
	10-34	---	30-50	4.5-6.0	---	---	---	---
	34-60	30-36	---	4.5-7.8	0-15	---	---	---
Lindley	0-7	---	10-16	4.5-6.0	0	0	0	0
	7-46	15-20	---	4.5-6.5	0	0	0	0
	46-60	10-16	---	4.5-7.8	0	0	0	0
LsD:								
Keswick	0-10	20-25	---	4.5-6.5	---	---	---	---
	10-34	---	30-50	4.5-6.0	---	---	---	---
	34-60	30-36	---	4.5-7.8	0-15	---	---	---
Lindley	0-7	---	10-16	4.5-6.0	0	0	0	0
	7-46	15-20	---	4.5-6.5	0	0	0	0
	46-60	10-16	---	4.5-7.8	0	0	0	0
LwD3:								
Lindley	0-7	16-22	---	4.5-7.3	0	0	0	0
	7-46	15-20	---	4.5-6.5	0	0	0	0
	46-60	10-16	---	4.5-7.8	0	0	0	0

Table J2.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Keswick	0-10	25-30	---	4.5-7.3	---	---	---	---
	10-34	---	30-50	4.5-6.0	---	---	---	---
	34-60	30-36	---	4.5-7.8	0-15	---	---	---
M-W:								
Water	---	---	---	---	---	---	---	---
MaC:								
Mandeville	0-8	5.0-10	---	5.1-6.5	0	0	0	0
	8-19	---	6.0-16	4.5-6.0	0	0	0	0
	19-35	---	6.0-16	4.5-6.0	0	0	0	0
	35-60	---	---	---	---	---	---	---
MaD:								
Mandeville	0-8	5.0-10	---	5.1-6.5	0	0	0	0
	8-19	---	6.0-16	4.5-6.0	0	0	0	0
	19-35	---	6.0-16	4.5-6.0	0	0	0	0
	35-60	---	---	---	---	---	---	---
MaE:								
Mandeville	0-8	5.0-10	---	5.1-6.5	0	0	0	0
	8-19	---	6.0-16	4.5-6.0	0	0	0	0
	19-35	---	6.0-16	4.5-6.0	0	0	0	0
	35-60	---	---	---	---	---	---	---
MbD3:								
Mandeville	0-1	5.0-10	---	5.1-6.5	0	0	0	0
	1-19	---	6.0-16	4.5-6.0	0	0	0	0
	19-35	---	6.0-16	4.5-6.0	0	0	0	0
	35-60	---	---	---	---	---	---	---
Mc:								
Marion	0-14	7.0-16	---	4.5-6.5	0	0	0	0
	14-33	---	24-31	4.5-5.5	0	0	0	0
	33-60	---	15-20	4.5-6.0	0	0	0	0
MhB:								
Marshall	0-13	25-30	---	5.6-6.5	0	0	0	0
	13-21	25-30	---	5.6-6.5	0	0	0	0
	21-35	25-30	---	6.1-6.5	0	0	0	0
	35-60	20-25	---	6.1-7.3	0	0	0	0
MhC:								
Marshall	0-13	25-30	---	5.6-6.5	0	0	0	0
	13-21	25-30	---	5.6-6.5	0	0	0	0
	21-35	25-30	---	6.1-6.5	0	0	0	0
	35-60	20-25	---	6.1-7.3	0	0	0	0
MkC:								
Mcgirk	0-15	8.0-16	---	5.1-6.0	0	0	0	0
	15-20	---	14-20	4.5-5.5	0	0	0	0
	20-32	---	18-25	4.5-6.0	0	0	0	0
	32-60	---	10-18	4.5-6.0	0	0	0	0
MnB:								
Menfro	0-6	10-16	---	5.1-7.3	---	---	---	---
	6-12	15-20	---	5.1-7.3	---	---	---	---
	12-60	15-20	---	5.1-7.3	---	---	---	---

Table J2.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
MnC:								
Menfro	0-6	10-16	---	5.1-7.3	---	---	---	---
	6-12	15-20	---	5.1-7.3	---	---	---	---
	12-60	15-20	---	5.1-7.3	---	---	---	---
MnD:								
Menfro	0-6	10-16	---	5.1-7.3	---	---	---	---
	6-12	15-20	---	5.1-7.3	---	---	---	---
	12-60	15-20	---	5.1-7.3	---	---	---	---
MnD3:								
Menfro	0-6	10-16	---	5.1-7.3	---	---	---	---
	6-12	15-20	---	5.1-7.3	---	---	---	---
	12-60	15-20	---	5.1-7.3	---	---	---	---
MnE:								
Menfro	0-6	10-16	---	5.1-7.3	---	---	---	---
	6-12	15-20	---	5.1-7.3	---	---	---	---
	12-60	15-20	---	5.1-7.3	---	---	---	---
MoB:								
Mexico	0-15	10-18	---	5.1-7.3	---	---	---	---
	15-29	---	26-30	4.5-6.0	---	---	---	---
	29-38	18-26	---	5.1-7.3	---	---	---	---
	38-60	14-26	---	5.1-7.3	---	---	---	---
Mu:								
Moniteau	0-7	10-16	---	5.6-6.5	---	---	---	---
	7-14	9.0-16	---	5.1-7.3	---	---	---	---
	14-67	---	19-26	4.5-6.0	---	---	---	---
	67-87	---	9.0-18	4.5-6.0	---	---	---	---
NaB:								
Napier	0-12	20-25	---	6.1-7.3	0	0	0	0
	12-60	20-25	---	6.1-7.3	0-10	0	0	0
Nd:								
Nodaway	0-8	---	---	6.1-7.3	---	---	0	---
	8-41	---	---	6.1-7.3	---	---	0	---
	41-60	---	---	6.1-7.3	---	---	0	---
NoE:								
Norris	0-3	---	6.0-16	4.5-5.5	0	0	0	0
	3-13	---	5.0-15	4.5-5.5	0	0	0	0
	13-60	---	---	---	---	---	---	---
Rock Land	0-60	---	---	---	---	---	0	---
PrB:								
Pershing	0-17	20-25	---	4.5-6.5	0	0	0	0
	17-20	25-30	---	5.1-6.0	0	0	0	0
	20-49	30-36	---	5.1-6.0	0	0	0	0
	49-60	25-30	---	5.1-6.0	0	0	0	0
PrC:								
Pershing	0-17	20-25	---	4.5-6.5	0	0	0	0
	17-20	25-30	---	5.1-6.0	0	0	0	0
	20-49	30-36	---	5.1-6.0	0	0	0	0
	49-60	25-30	---	5.1-6.0	0	0	0	0

Table J2.--Chemical Properties of the Soils--Continued

Map symbol and soil name	Depth	Cation exchange capacity	Effective cation exchange capacity	Soil reaction	Calcium carbonate	Gypsum	Salinity	Sodium adsorption ratio
	In	meq/100 g	meq/100 g	pH	Pct	Pct	mmhos/cm	
Rw:								
Riverwash	0-6	---	---	---	---	---	0	---
	6-60	---	---	---	---	---	0	---
Sa:								
Sarpy	0-11	2.0-6.0	---	6.6-8.4	1-2	---	---	---
	11-60	2.0-6.0	---	7.4-8.4	1-2	---	---	---
ShB:								
Sharpsburg	0-16	25-30	---	5.1-6.5	0	0	0	0
	16-31	25-30	---	5.1-6.0	0	0	0	0
	31-38	25-30	---	5.1-6.5	0	0	0	0
	38-60	25-30	---	6.1-6.5	0	0	0	0
ShC:								
Sharpsburg	0-16	25-30	---	5.1-6.5	0	0	0	0
	16-31	25-30	---	5.1-6.0	0	0	0	0
	31-38	25-30	---	5.1-6.5	0	0	0	0
	38-60	25-30	---	6.1-6.5	0	0	0	0
SM:								
Strip Mines	0-60	---	---	---	---	---	0	---
W:								
Water	---	---	---	---	---	---	---	---
WeB:								
Weller	0-11	---	15-20	4.5-6.0	0	0	0	0
	11-56	---	30-35	4.5-6.0	0	0	0	0
	56-71	25-30	---	5.1-6.0	0	0	0	0
WeC:								
Weller	0-11	---	15-20	4.5-6.0	0	0	0	0
	11-56	---	30-35	4.5-6.0	0	0	0	0
	56-71	25-30	---	5.1-6.0	0	0	0	0
WnB:								
Winfield	0-13	10-15	---	5.6-8.3	---	---	---	---
	13-15	12-17	---	5.6-7.3	---	---	---	---
	15-40	---	13-18	4.5-6.0	---	---	---	---
	40-60	10-14	---	5.1-6.0	---	---	---	---
WnC:								
Winfield	0-13	10-15	---	5.6-8.3	---	---	---	---
	13-15	12-17	---	5.6-7.3	---	---	---	---
	15-40	---	13-18	4.5-6.0	---	---	---	---
	40-60	10-14	---	5.1-6.0	---	---	---	---
WnD:								
Winfield	0-13	10-15	---	5.6-8.3	---	---	---	---
	13-15	12-17	---	5.6-7.3	---	---	---	---
	15-40	---	13-18	4.5-6.0	---	---	---	---
	40-60	10-14	---	5.1-6.0	---	---	---	---
WnD3:								
Winfield	0-13	10-15	---	5.6-8.3	---	---	---	---
	13-15	12-17	---	5.6-7.3	---	---	---	---
	15-40	---	13-18	4.5-6.0	---	---	---	---
	40-60	10-14	---	5.1-6.0	---	---	---	---